

A Revision of the *Maliattha vialis* species-group (Lepidoptera, Noctuidae, Acontiinae) with Description of Four New Species from China

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Abstract *Maliattha vialis* species-group (Lepidoptera, Noctuidae, Acontiinae) is revised. Four species (*Maliattha ninae* sp. nov., *M. dissimilis* sp. nov., *M. tapaishana* sp. nov., *M. ahni* sp. nov.) from China are described as new to science. Three species of *vialis* group are distributed in Russian Far East and Japan, two of them are known from Korea, and eight species are known from China. The lectotype for *M. bella* Staudinger, 1892 is designated.

Key words Lepidoptera, Noctuidae, Acontiinae, Far East, China, taxonomy, new species

INTRODUCTION

The *Maliattha vialis* species-group has been a source of confusions for a long time to taxonomists due to the hardly separable external appearance each other, having a uniform type of the forewing pattern. The *vialis*-group is a part of large unrevised genus *Maliattha* Walker, 1863, of the subfamily Acontiinae, which includes 53 described species (Poole, 1989), and distributed mostly in the Subtropical and Tropical regions of the East and South East Asia, Australia and Africa. In the Palearctic region, the genus *Maliattha* and *vialis*-group is localized in the Manchurian subregion, the *Maliattha vialis* Moore itself is distributed in SW China, Nepal, N India, and Pakistan.

The *vialis*-group has been known from the Far Eastern countries by two species. One of them, *M. bella* (Staudinger, 1888) was described from Russian Far East. Some earlier authors (Hampson, 1910, Warren, 1914; Moltrecht, 1929; Inoue & Sugi, 1958) referred this name as form or as a subspecies of *M. vialis* Moore. Sugi (1982) reported two species of the *vialis*-group from Japan as "*M. vialis*" and *M. bella*, and illustrated their male genitalia. However, after the examination of specimens of *M. vialis* from Nepal and N India, and the holotype of *Oruza chalcogramma* Bryk, 1948 (type locality: North Korea), Sugi (1986, 1994) transferred the latter to the genus *Maliattha* and corrected his misidentification of "*M. vialis*" to *M. chalcogramma*. One species, *M. vialis* (in fact probably *M. bella*) was reported from China (Chen, 1982), and two species, *M. bella* and "*M. vialis*" (in fact *M. chalcogramma*) were reported from

Korea. The fourth species of *vialis*-group, *M. chasanica* Zolotareno & Dubatolov, 1996 was described from the South of the Russian Far East and recently found in Japan (Doi, 1997).

In the course of the study of Chinese species of the Noctuidae in the collection of Forschungsinstitut and Museum Alexander Koenig (ZFMK, Bonn), I examined the genitalia of the extensive series of *M. vialis*-group throughout the range of its distribution and found that the *vialis*-group is represented by eight different taxa in the Far Eastern countries. After the examination of the holo- and syntypes for four of them (*M. bella*, *M. vialis*, *M. chalcogramma*, *M. chasanica*), the other four species are recognized as new for science, and described below.

The *Maliattha vialis*-group could be characterized by following characters: Small moth with wing expanse 13–20 mm. Proboscis developed. Antennae of male filiform. Eyes large. Palpi cutter-like, with very small 3rd segment, about 2.5 times smaller than 2nd. Head and thorax covered with scales, formed hat of erected scales on occipit. Abdomen with 1–2 crests of erected black scales. Wing maculation very characteristic for the group. Forewing separated for two part from apical angle to basal third of inner margin; upper part allied to costal margin and basal angle usually light, yellowish, pale olive or ochreous; lower part allied to terminal and inner margin dark brown, reddish brown; bordering line between two parts of wing pale yellowish or white; outer line usually expressed as thin-white line, more distinct (as white transversal mark) opposite tornal angle. In the male genitalia, the group is characterized by having weak steak-like of triangular-elongate uncus; narrow tegumen, relatively short U- or V-shaped vinculum; plate-like fultura interior, elongated, lobe-like valva with well expressed clavus; harpe absent; apical part of valva armed by 3–5 short or elongated finger-like extensions with small sclerotized claw-like spines on apices. Aedeagus shorter than valva in length, weak, with well expressed caulis; vesica with a group of small spine cornuti. Female genitalia rather simple; papillae anales weak; apophyses anteriores and posteriores almost equal in length; antrum, ductus bursae, and corpus bursa membranous; corpus bursae usually round or oval in shape, with single rounded signum; ductus seminalis arising from caudal part of bursae.

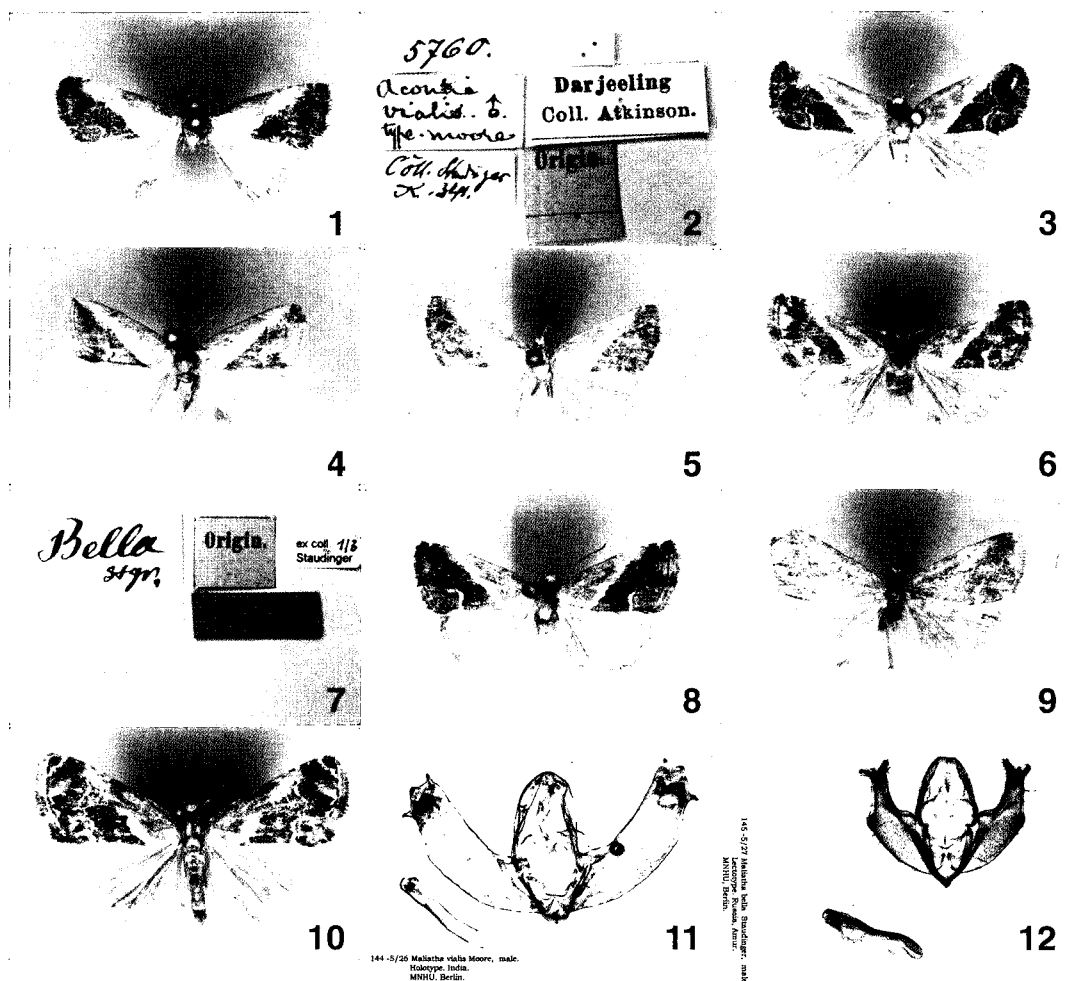
SYSTEMATIC REVIEW

Maliattha vialis (Moore 1882)

(Figs 1, 11, 21)

Acontia vialis Moore 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 135 (HT: India, Dharmasala, Darjiling [MNHU, Berlin]. Hampson, 1910: 507 (*Lithacodia vialis*, part.); Warren, 1914: 275, pl. 51 m (*Maliattha vialis*, ?part.); Poole, 1989: 618; Yoshimoto, 1993: 51, pl. 43: 41 (*Maliattha vialis*).

Diagnosis. External appearance (Fig. 1, holotype). Wing expanse, 17–18 mm. Externally differs from related species of the group by some larger size (larger than *M. chalcogramma* and *M. chasanica*) and sandy yellow coloration of the light part of the wing. Bordering line between light and dark part of wing some lighter than in other species. Head and thorax sandy yellow with more intensive coloration in mid



Figs 1-10. *Maliattha* spp., external appearance: 1, *M. vialis* (Moore 1882), holotype, N India; 2, *ditto*, labels; 3, *M. chalcogramma* (Bryk, 1948), China; 4, *M. dissimilis* sp. n., holotype, China, Linping; 5, *M. khasanica* Zolotarensko & Dubatolov, 1996, China; 6, *M. bella* (Staudinger, 1888), lectotype, RFE, Vladivostok; 7, *ditto*, labels; 8, *M. niniae* sp. n., holotype, China; 9, *M. tapaishana* sp. n. holotype, China, Tapaishan; 10, *M. ahni* sp. n., holotype, China, Likiang. **Figs 11-12.** *Maliattha* spp., male genitalia. 11, *M. vialis* (Moore 1882), holotype, N India [MNHU, Berlin]; 12, *M. bella* (Staudinger, 1888), lectotype, RFE, Vladivostok [MNHU, Berlin].

of costal area and in basal part of wing. Dark part of forewing dark brown with intrusion of violet pink and olive scales; outer line thin, white, more expressed near tornal angle; reniform traceable, bordered by whitish scales, violet pink inside; medial shadow traceable as a row of bluish pink scales; subterminal and terminal fields separated by dark suffusion; terminal field with intrusion of violet pink scales; terminal line dark, diffused; cilia twin, brown with violet pink scales. Hindwing pale greyish, some darker in outer part; cilia greyish.

Male genitalia (Fig. 11, holotype). The species differs from its allied by having of long, slightly curved stick-like uncus, which is slightly bifurcated in tip. Valva large, broad, with about parallel dorsal and

ventral margins, with three short extensions armed by claws in apical margin; clavus moderate, thin. Aedeagus about two times shorter than valva.

Female genitalia (Fig. 21). Differs from other species of the group by small antrum, relatively long ductus bursae and elongated corpus bursae, which some extended and rounded anteriorly. Differently from other species of the group, signum situated anteriorly in corpus bursae.

Distribution. Pakistan, North India, Nepal, South West China (North of Yunnan Province).

Material examined. Holotype of *M. vialis*: INDIA: ♂, *Acontia vialis* ♂. Type Moore/ Darjeeling coll. Atkinson / Origin./ 5760 [MNHU, Berlin]; PAKISTAN: 1 ♂, Pakistan (Kohistan) 72.32'E, 35.10'N Miandam, 1500 m, 25. VI – 5. VII (leg. Z. Weldenhater), Genit. slide: ZFMK 1721; CHINA: 4 ♂, 1 ♀, [Prov. Yunnan], 'Likiang, Provinz Nord-Yunnan, 29, 31. VII, 5, 9. VIII 1934 (H. Höne); Yunnan 24. VI 1935 (H. Höne), Genit. slide: ZFMK 1816, 1817; 2 ♂, Likiang, ca. 2000 m, Prov. Nord Yunnan, 29. VII, 14. VIII 1935 (H. Höne).

Notes. The holotype of *M. vialis* is preserved in MNHU, Berlin, but not in BMNH, London, as it was referred by Poole (1989).

***Maliattha chalcogramma* (Bryk, 1948)**

(Figs 3, 14, 23)

Oruza chalcogramma Bryk, 1948, Ark. Zool. 41A(1): 112, pl. 5: 7 (TL: N Korea, Hamgyeong namdo [Shuotsu] [HT: NRM, Stockholm]).

Maliattha vialis auct., nec Moore, 1882. Inoue et Sugi, 1958: 543 (*Maliatta vialis*, part., misident.); Sugi, 1982: 1: 815, 2: 383, pl. 197: 19, 20; pl. 374: 3 (*Maliattha vialis*: misident.); Ueda, 1987: 101, figs. 79, 80, 89–A (*Maliattha vialis*, misident.); Poole, 1989: 746 (*Oruza chalcogramma*); Sugi, 1986: 40; 1994: 86 (*Maliattha chalcogramma*); Kononenko, Ahn and Ronkay, 1998: 166, fig. 430 (*Maliattha chalcogramma*).

Diagnosis. External appearance (Fig. 3). Wing expanse, 13–16 mm. Differs from allied species by the more olive-sandy tint of the pale part and less reddish, more violet tint of the dark part of the forewing. Head, thorax and light part of forewing sandy yellowish. Bordering line between light and dark parts expressed in inner part of forewing as white streak bordered with black outside; dark part brown reddish, darker than in *M. bella*, with intrusion of sandy and pink scales; outer line hardly traceable, expressed mostly near outer margin; subterminal field some darker, diffused; terminal field with some pink violet tint; terminal line brown, indistinct; cilia twin, pink brown. Hindwing grey; cilia yellowish grey.

Male genitalia (Fig. 14). In the male genitalia, the species shows affinity to *M. vialis*, but well differentiated by the shape of the uncus, which is wide at base, constricted and pointed to apex. Valva with clavus longer than in *M. vialis*, curved apically, with about parallel dorsal and ventral margins from base to middle part, some narrow from middle to apical part; apical margin with three short extensions armed with claws; ventral extension bigger than dorsal and medial ones. Aedeagus larger than in *M. vialis*, about 1.4 times shorter than valva.

Female genitalia (Fig. 23). Differs from *M. vialis* by wider antrum, shorter ductus bursae, and oval

shape of corpus (?) bursae. Signum situated medially in corpus bursae.

Distribution. Russian Far East (South of Primorye terr.), Korean peninsula, Japan, East and South East China (Prov. Zhejiang).

Material examined. CHINA: 21 ♂, 7 ♀, [Prov. Zhejiang] West Tien-mu-Shan, Prov. Chekiang, 24. V, 9, 11, 18, 23; IV, 18, 19, 20, 24, 23, 28, 31; VIII, 2, 3, 4, 7, 8, 19, IX, (H. Höne). genit. slides: ZFMK 1808, 1810, 1811. JAPAN: 1 ♂, Choji am Fuji, VI 1913 (H. Höne). NORTH KOREA: Holotype of *Oruza chalcogramma*: ♂, Korea, Shuotsu 1935. Sten Bergman 19. VII/ Typus/ *Oruza chalcogramma*, F. Bryk det. 1947/ 157 83/ Riksmuseum Stockholm./ [NRM, Stockholm]; SOUTH KOREA: Large series (over 50 specimens) from Hoengcheon, Chuncheon, Suwon, Gwangjeung, Yangyang, Mt. Seolak, Mt. Jeombong, Bongmyongri from collections of the National Institute of Agricultural Science and Technology, Suwon; Center for Insect Systematic, Chuncheon; and Forestry Research Institute, Seoul. Flight period from mid June to end of July. RUSSIAN FAR EAST: Primorye terr., 4 specimens, Kedrovaya Pad nature reservation, basin Narva river, 2, 3, 6. VII 1976 (Kononenko).

***Maliattha dissimilis* sp. nov.**

(Figs 4, 15)

Diagnosis. Externally the new species is similar to *M. bella*, *M. chalcogramma* and *M. khasanica*, but differs from them by the paler olive-greenish tint of the forewing, especially paler dark element of pattern, less expressed reddish tint, presence of dark discal spot, well separated dark triangular figure in dark part, and more strait boundary between light and dark part of wing pattern. It also differs well from related species by the structure of the male genitalia.

Description. External appearance (Fig. 4, holotype). Wing expanse, 14 mm. Head and thorax covered with sandy yellow scales. Light part of forewing pale greyish yellow, some darker in costal area extended to apex; orbicular expressed as small black dot and outer line traceable, more expressed in central part of wing and especially near inner margin; a black triangular fascia in central part of wing, which restricted from inner side by bordering line and from outer side by outer line; subterminal diffused, darker than terminal field, with suffusion of reddish scales, especially in tornal angle; apical angle with brown mark; cilia pale brownish. Hindwing greyish; cilia pale grey. Female unknown.

Male genitalia (Fig. 15, holotype). Uncus strong, steak-like, slightly curved and extended on apical part, with path of setae on apex. Tegumen moderate, high; vinculum small, V-shaped. Fultura interior plate-like, narrower apically, with deep shallow cut in apical margin. Valva relatively narrow, some broader to mid, with about parallel dorsal and ventral margins, curved dorsally; clavus not expressed; harpe absent; apical margin armed by three extensions with sclerotized claws; ventral extension much longer than apical and medial ones. Aedeagus same size as in other species of the group, but about 2.3 times shorter than valva; vesica without cornuti.

Distribution. South China (Prov. Guangdong).

Material examined. Holotype: CHINA: ♂, [Prov. Guangdong], Linping, Pr. Kwantung, IV. 1922 (H. Höne). Genit. slide: ZFMK1818 ♂.

Etymology. The species name is derived from its dissimilarity with other members of *M. vialis* group.

***Maliattha khasanica* Zolotarenko & Dubatolov, 1996**

(Figs 5, 16)

Maliattha khasanica Zolotarenko & Dubatolov, 1996 Atalanta, 26 (1/2): 299, fig. 1a, 2a (TL: RFE, S Primorye terr., Khasansky distr. [HT: ZN BI Novosibirsk]). Doi, 1997: 119–124 (*Maliatha khasanica*).

Diagnosis. External appearance (Fig. 5). Wing expanse, 15–16 mm. Similar to *M. chalcogramma* and hardly separable from the former externally, but differentiated well by the structure of the male genitalia. Head, thorax and light part of forewing pale greyish yellow, a bit more greyish and paler than in *M. chalcogramma*. Subterminal field of forewing some more reddish than in *M. chalcogramma*, especially near tornal angle; boundary between subterminal and terminal fields less expressed than those in *M. chalcogramma*. Other elements of wing coloration and pattern as in *M. chalcogramma*. The female is unknown.

Male genitalia (Fig. 16). Differs from *M. chalcogramma* and other allies by the shape of the uncus and the presence of four extensions on the apical margin of the valva. Uncus rather long, steak-like, some wider, curved in apical part, rounded on apex. Valva rather curved, with about parallel dorsal and ventral margins, with slight neck before apex; apical margin with four finger-like extensions armed by claws; ventral extension longer than other ones; clavus moderate, thicker than in *M. chalcogramma*. Aedeagus about 1.3 times shorter than in *M. chalcogramma*.

Distribution. Russian Far East (South of Primorye territory), Japan (Doi, 1997), South East and West China (Prov. Fujian, Zhejiang, Sichuan).

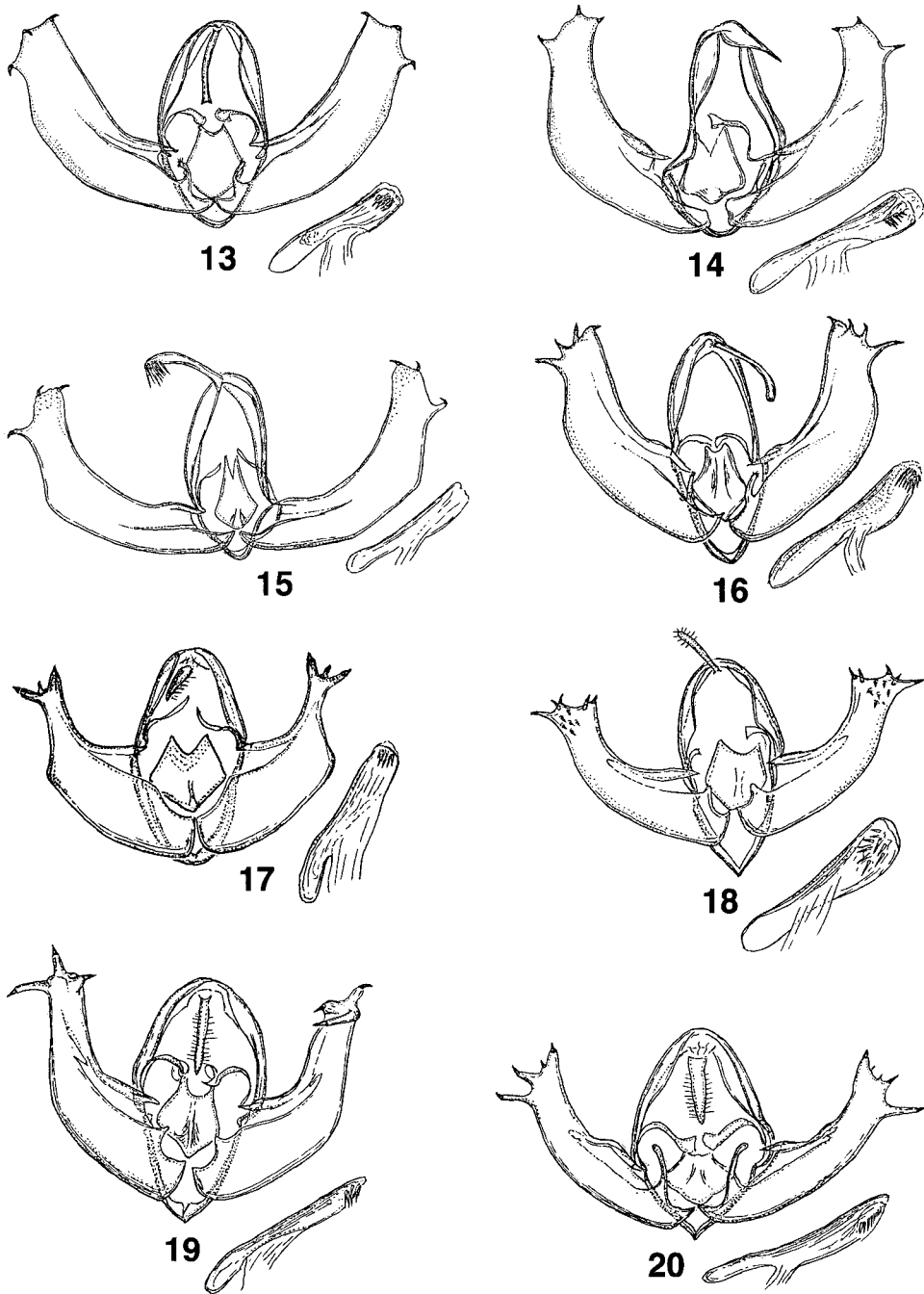
Material examined. CHINA: 1 ♂, [Prov. Fujian] Kuatun (Fukien) (2300 m), 27° 40' N, 117, 40° E, 2. V. 1938 (J. Klapperich), genit. slide: ZFMK 1814; 1 ♂, [Prov. Sichuan], Scetschwan West China, Exped. Stozner, genit. slide: ZFMK 1813; 2 ♂, [Prov. Zhejiang], West Tien-mu-Shan, Prov. Chekiang, 19, 24. VIII 1932 (H. Höne).

***Maliattha bella* (Staudinger, 1888)**

(Figs 12, 17, 22)

Thalpocharis bella Staudinger, 1888, Stettin. ent. Ztg. 49: 264 (TL: RFE, Vladivostok [ST: MNHU, Berlin]). Staudinger, 1892: 559, pl. XI: 1; Staudinger, 1901: 230 (*Thalpocharis bella*); Hampson, 1910: 507 (*Lithacodia vialis* f. *bella*), Warren, 1914: 276, pl. 51 (*Maliatha vialis* form *bella*); Moltrecht, 1929: 37 (*Maliatha vialis bella*); Inoue, Sugi, 1958: 543 (*Maliatha vialis* f. *bella*, part.); Chen, 1982: 330 (*Maliatha vialis*, misident.) Sugi, 1982: 1: 815, 2: 383, pl. 197: 16–18, pl. 374: 2; Ueda, 1987: 104, figs. 81, 82, 89–B; Poole, 1989: 617; Kononenko, 1990: 10; Kononenko, Ahn, Ronkay, 1998: 167, fig. 431 (*Maliatha bella*).

Diagnosis. External appearance (Fig. 6, lectotype). Wing expanse, 16–17 mm. Externally very similar to its allied *M. ninae* and hardly separable from the former by some more wide white-line between pale and dark part of the forewing, and less reddish marks in the terminal and apical angles of the wing. Head,



Figs 13-20. *Maliattha* spp., male genitalia: 13, *M. vialis* (Moore 1882), SW China, Likiang, praep. ZFMK1817; 14, *M. chalcogramma* (Bryk, 1948), China, West Tien-mu-shan, praep. ZFMK1811; 15, *M. dissimilis* sp. n., holotype, China, Linping, praep. ZFMK1818; 16, *M. khasanica* Zolotareno & Dubatolov, 1996, China, Sichuan, praep. ZFMK1813; 17, *M. bella* (Staudinger, 1888), RFE, Primorye terr; 18, *M. ninae* sp. n., paratype, China, Hoengshan, praep. ZFMK1812; 19, *M. tapaishana*, sp. n. holotype, China, Tapaishan, praep. ZFMK1821; 20, *M. ahni* sp. n., paratype, China, Likiang, praep. ZFMK1820.

thorax and light part of forewing olive greenish; dark part of wing reddish brown, with violet tint; bordering line between light and dark part white, relatively wide, especially in inner part; reniform expressed as a dark spot; outer line thin, expressed in outer part as white mark; subterminal and terminal fields well separated, bordering line dentate; terminal field with pink scales; cilia reddish brown with pink scales. Hindwing greyish; cilia pale grey.

Male genitalia (Fig. 12, lectotype, fig. 17). In the male genitalia it differs by short, some broad uncus and characteristically shape of the valva: broad in base, narrower to middle, forms neck and became narrow in apical part; clavus not expressed; apex with three moderate finger-like extensions, armed by claws; dorsal and ventral extensions larger than medial one. Aedeagus about 1.3 times shorter than valva.

Female genitalia (Fig. 22). Differs from *M. nina* by some more narrower antrum, round shape of corpus bursae, and position of signum, which situated bursa.

Distribution. Russian Far East (S Khabarovsk terr., Primorye terr., Kuriles: Kunashir Isl.), Japan (Hokkaido, Honshu, Shikoku), Korea, ?China.

Material examined. Lectotype (designated here): RUSSIAN FAR EAST: ♂, Wladiwostok Chr. / Origin. /Bella Stgr. Paralectotypes: 2 ♀ with label Orig.. 1 ♀, Amur, Pompejefka; 2 indiv., Kedrovaya Pad nature reservation, bassin Narva river (former Sidemi) 6. VII 1976 (Kononenko); 10 indiv., Kedrovaya Pad nature reservation, 2. VI–31. VIII 1983 (Kononenko); 3 indiv., vicinity of Vladivostok, De Friza peninsua, 26. 29. VII 1957, 2. VII 1959 (M. Omelko), 2 indiv., 7 km N Zanadvorovka, 30. VII–4. VIII 1984 (Kononenko), 1 indiv., Troitzky bay, near Andreevka 2. VII 1981 (Kononenko); 2 indiv., 40 km E Chuguevka, 22. VII 1974 (Mescheryakov)

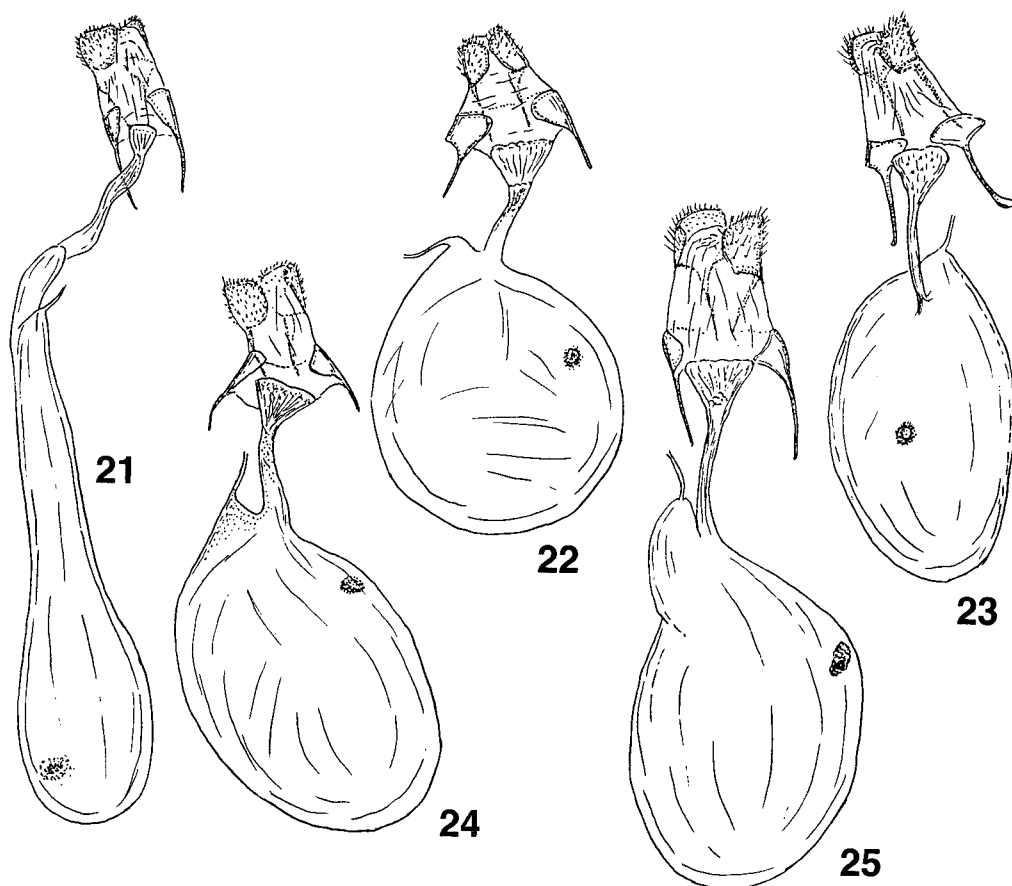
***Maliattha ninae* sp. nov.**

(Figs 8, 18, 24)

Diagnosis. In the external appearance the new species is very close (sometimes indistinguishable) to *M. bella*, but differs from the former by having a bit more darker wing coloration, thinner bordering line between light and dark parts, more reddish tint of dark part, less expressed boundary between subterminal and terminal fields and by presence of bright red–orange mark near tornal angle.

Description. External appearance (Fig. 8, holotype). Wing expanse, 15–17 mm. Head, thorax and light part of forewing olive yellowish, dark part of wing reddish brown, brighter than in *M. bella*. Bordering line between light and dark part of forewing, relatively narrow, diffused in costal area; dark part brownish; outer line traceable, expressed in outer part as white streak; reniform traceable, as diffused patch of pink scales and dot of dark erected scales; subterminal field reddish brown; terminal field brown, with intrusion of pink scales around veins; area outward white streak to tornal angle with bright, reddish brown mark; Cilia twin, reddish brown. Hindwing grey; cilia pale grey.

Male genitalia (Fig. 18, paratype). Differs from related *M. bella* by steak-like uncus, shape of valva and arming of its apical margin. Uncus weak, strait, steak-like. Tegumen narrow, weak; vinculum V-shaped; fultura interior plate-like, with shallow cut in apical margin. Valva relatively broad at base, narrower to mid, with about parallel margins from mid to apex; clavus small, broad; harpe absent; apical margin armed by five extensions with claws, four of them rather small, ventral extension long, tapered; sith 6–8



Figs 21-25. *Maliattha* spp., female genitalia: 21, *M. vialis* (Moore 1882), SW China, Likiang, praep. ZFMK1835; 22, *M. bella* (Staudinger, 1888), RFE, Amur reg., Pokrovka praep. ZFMK1833; 23, *M. chalcogramma* (Bryk, 1948), China, West Tien-mu-shan, praep. ZFMK1859; 24, *M. ninae* sp. n., paratype, China, Hoengshan, praep. ZFMK1856; 25, *M. ahni* sp. n., paratype, China, Likiang, praep. ZFMK1819.

small spines in apical part. Aedeagus same size as in other species of the group, about 1.2 times shorter than valva; vesica armed by a dozen small spine cornuti.

Female genitalia (Fig. 24, paratype). Similar to those of *M. bella*, but it differs by broader papillae annales, broader antrum, oval shape of bursae. Signum situated in caudal third of corpus bursae. Cervix bursae slightly sclerotized.

Distribution. The species is known from Central to South-West China (Prov. Hunnan, Jiangsu, Fujian, Zhejiang, Sichuan).

Material examined. Holotype: CHINA: ♂, [Prov. Hunan], Hoengshan, Prov. Hunan, 16. VI 1933 (H. Höne) genit. slide: ZFMK 1806; 12 ♂, 6 ♀ from same locality, 7, 12, 13, 21, 23, 24, 25, 26, 29. V, 10, 22. VII, 20, 21. VIII, 15. IX; 9 ♂, 3 ♀, [Prov. Jiangsu] Luntang b. Nanking, Prov. Kiangsu (H. Hone), 28, 25, 30. V, 13, 14, 17, 18, 22. VI, 1933; 8 ♂, 3 ♀, [Prov. Zhejiang], West Tien-mu-Shan, Prov. Chekiang, 17. IV, 7, 10. V, 13. VI, 31. VII, 15, 21, 26. VIII, 7, 8. IX 1932; 1 ♂, 2 ♀, [Prov. Zhejiang]

Berge sudl. Wenchow, Pr. Chekiang (China) (H. Höne), 13, 21, 11. IX 1940; 1 ♂, [Prov. Zhejiang] Mokanshan, Prov. Chekiang (H. Höne) 26. VIII 1926. 2 ♂, 3 ♀, [Prov. Fujian], Kuatun (Fukien) (2300 m), 27. 40'N, 117, 40 E, (J. Klapperich), 5, 6, 14, 27. V. 1938; 8 ♂, 8 ♀, [Prov. Sichuan], Scetschwan West China, Exped. Stozner, Coll. Dr. Werhli, Basel. genit. slide: ZFMK 1805, 1806, 1807, 1809, 1812, 1815.

Notes. This new species is very similar to *M. bella* in the external appearance, it was probably reported as the former by previous authors in China.

Etymology. The species name is derived from women's name Nina.

***Maliattha tapaishana* sp. nov.**

(Figs 9, 19)

Diagnosis. The new species differs from related *M. bella* by the structure of the male genitalia: longer and thinner uncus, more massive valva without neck in apical part (as in *M. bella*), thinner and relatively longer aedeagus.

Description. External appearance (Fig. 9, holotype). Wing expanse, 17 mm. Because the type specimen has worn off, it is impossible to present its diagnose and complete description. Judging from remains of wing pattern the species has same ground plane of wing pattern as other species of the group. Upper part of wing is pale greyish yellow and outer line expressed as white mark near tornal angle. Female unknown.

Male genitalia (Fig. 19, holotype). Uncus thin and long, strait. Tegumen moderate high; vinculum U-shaped; fultura interior plate-like, pointed at base, with shallow cut in apical margin. Valva more massive than in *M. bella*, relatively wide at base, gradually narrower to apex, curved at mid; clavi small; apex with three strong finger-like extensions armed by sclerotized claws. Aedeagus thinner and longer than in *M. bella*, about 1.3 times shorter than valva; vesica with 10–12 small spine-like cornuti.

Distribution. Central China (Prov. Shaanxi).

Material examined. Holotype: CHINA: ♂, [Prov. Shaanxi], Tapaishan in Tsiling, Sued Shensi, Ca 1700 m, 8. VII 1936 (H. Höne). genit. slide: ZFMK1821 ♂.

Etymology. The species name is derived from the collecting locality of the holotype.

***Maliattha ahni* sp. nov.**

(Figs 10, 20, 25)

Diagnosis. The new species undoubtedly belongs to *M. vialis* group. In the external appearance it shows some similarity with *Maliattha plumbitincta* Hampson, 1902 described from "Sikkim Tibet, Yatung". However, judging from the description and illustration (Hampson, 1910: 509, Pl. 164: 4), the new species is well differentiated by the smaller size (*L. plumbitincta* with wing expanse 24–30 mm), greyish hindwings and details of pattern of forewings. From other species of the group it differs by the larger size, rusty yellowish coloration of the light part of the wing, violet brown dark part of the wing and complex wing pattern.

Description. External appearance (Fig. 10, holotype). Wing expanse, 18–20 mm. Head and thorax covered with rusty yellowish scales. Abdomen with two crests from black erected scales. Upper part of wing from apical angle to basal third of wing rusty yellowish, darker in costal area, paler and more yellowish near bordering line; bordering line white, well expressed; dark part of wing dark brown with violet tint; orbicular as thin whitish bordering filled with brown and pink violet scales; outer line thin, whitish, well expressed from base of reniform to outer margin; subterminal field dark, violet brown, with characteristically dentate extension outward; bordering line between terminal and subterminal fields relatively wide, diffused, pale violet pink; in apical part it restrict apex of wing by thin violet semilunar line; apex dark; tornal angle with dark spot on pink violet background. Terminal line rusty reddish, forms reddish mark in apical angle; cilia twin, brown violet, with whitish bordering line. Hindwing greyish; cilia whitish.

Male genitalia (Fig. 20, paratype). Uncus relatively wide, long, strait. Tegumen high; vinculum V-shaped; futura interior plate-like, pointed at base, wide at middle. Valva shorter, narrower than in other species of the group, relatively wide at base, with almost parallel dorsal and ventral margins from mid to apex; clavi long, about width of valva in mid part; apex with three strong finger-like extensions armed by sclerotized claws (ventral and medial extensions longer than apical one) and small spine. Aedeagus relatively thin, long, about 1.3 times shorter than valva; vesica with 10–12 small spine-like cornuti.

Female genitalia (Fig. 25, paratype). Papillae annales broader than in other species, weak. Apophyses posteriores and anteriores almost equal in length. Antrum membranous, wrinkled. Ductus bursae and corpus bursae membranous. Corpus bursa elongate, oval, with small diverticulum in joining with ductus seminalis in caudal part; signum situated medially in corpus bursa.

Distribution. South West China (North of Yunnan Province).

Material examined. Holotype: CHINA: ♂, [Prov. Yunnan], Likiang ca. 2000 m, Prov. Nord Yunnan 24. VI 1935 (H. Höne). Paratypes 7 ♂, 5 ♀, from same locality, 1, 4, 7, 10, 14, 17, 23, 29, 31. VII 1935. 5 ♂, 3 ♀, same locality, 11. VI, 8, 9, 12, 13, 23, 30. VII, 5. VIII 1934, genit. slide: ZFMK1819 ♂, ZFMK1820 ♀.

Etymology. The species is named for a memory of my friend, talented Korean entomologist, Dr. Sung-Bok Ahn, who died in March 1999 in age 42 years old.

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